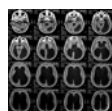
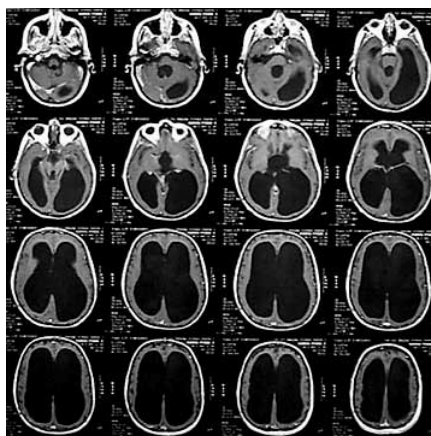
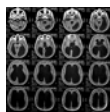


IDROCEFALO



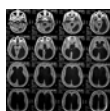
Definizione

Accumulo di liquor nei ventricoli con conseguente dilatazione degli stessi



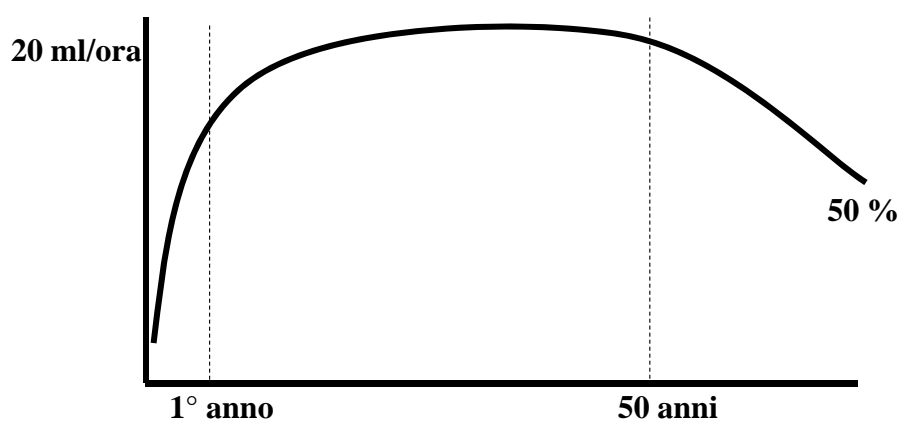
Produzione Liquorale

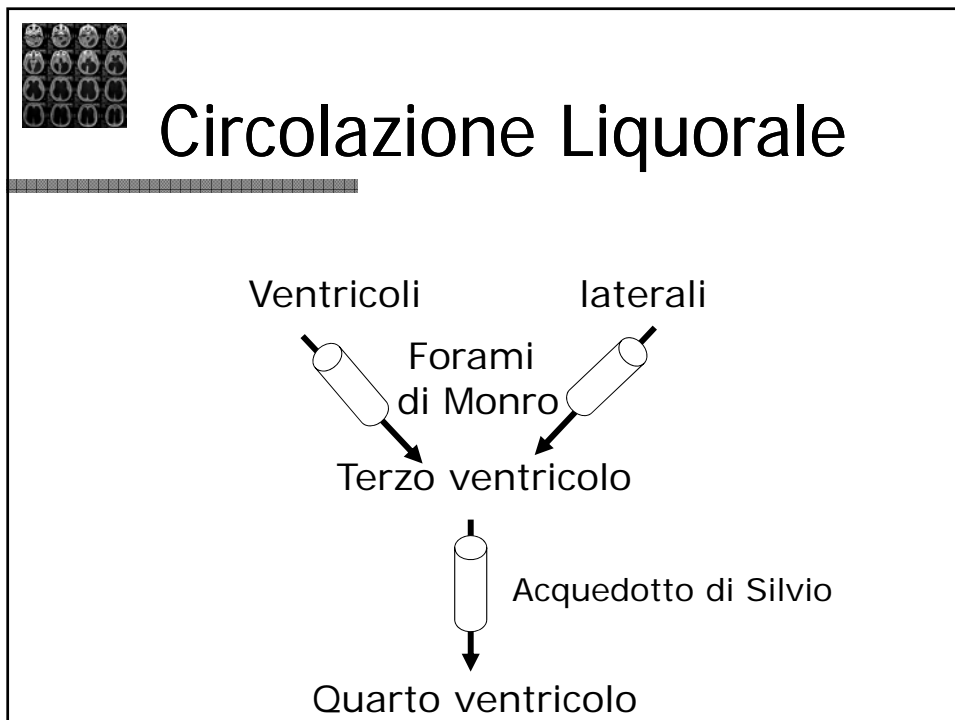
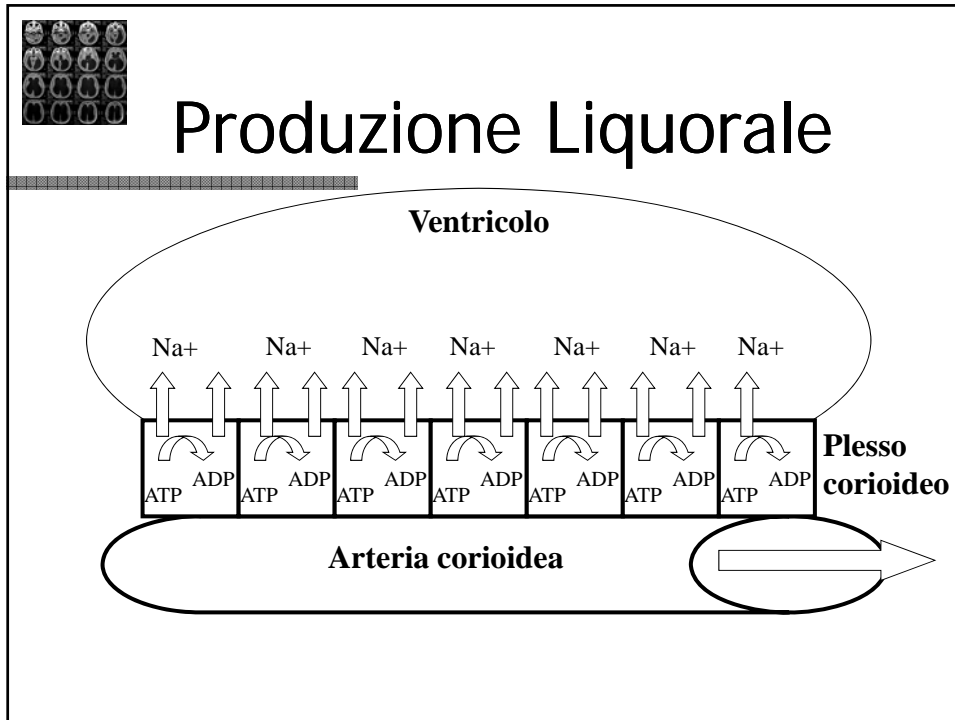
- Secrezione attiva a partire dalla circolazione arteriosa cerebrale a livello dei plessi corioidei
- Secrezione costante, non influenzata dalle normali variazioni dei parametri vitali
- Secrezione ATP dipendente

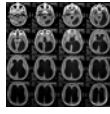


Produzione Liquorale

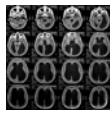
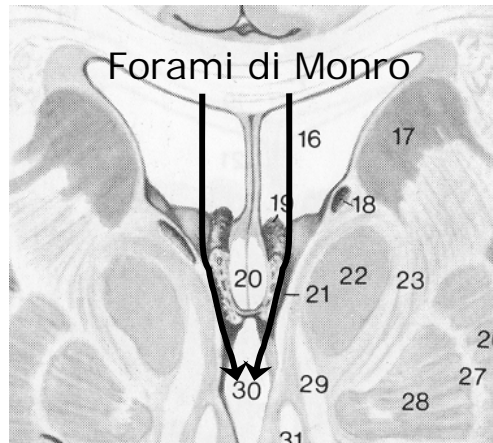
La produzione liquorale è di 0.35 ml/min (20 ml/ora)



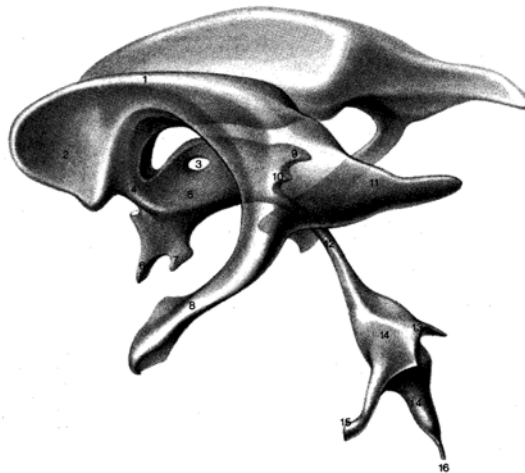


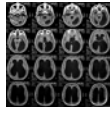


Circolazione Liquorale

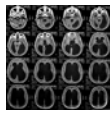
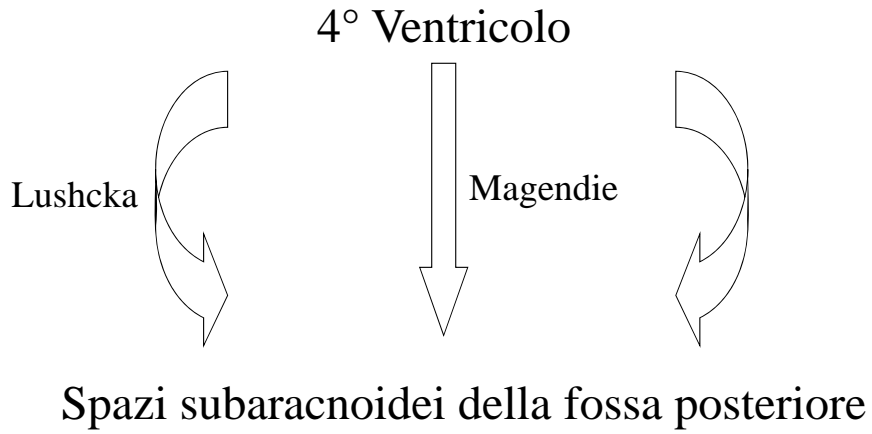


Circolazione Liquorale

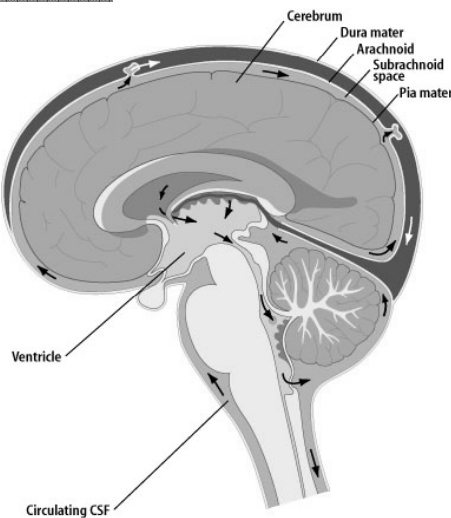




Circolazione Liquorale

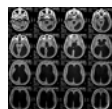


Circolazione Liquorale



Dinamica liquorale

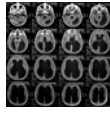
QuickTime™ e un
decompressore Codec YUV420
sono necessari per visualizzare quest'immagine.



Circolazione Liquorale

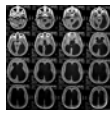
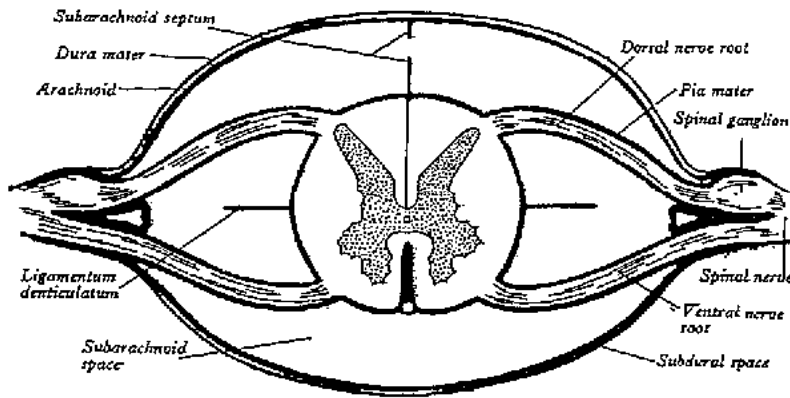
Spazi subaracnoidei

- Intracranici
 - ✓ Della base
 - ✓ Della convessità
- Spinali

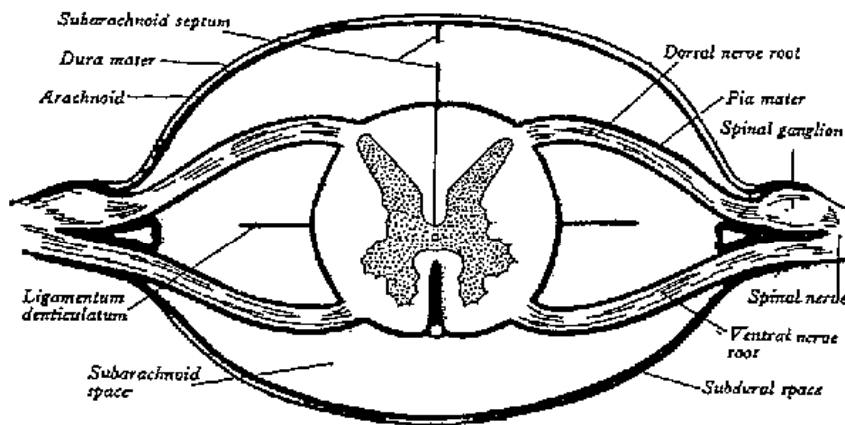


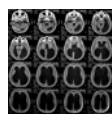
Circolazione Liquorale

Spazi subaracnoidei Spinali

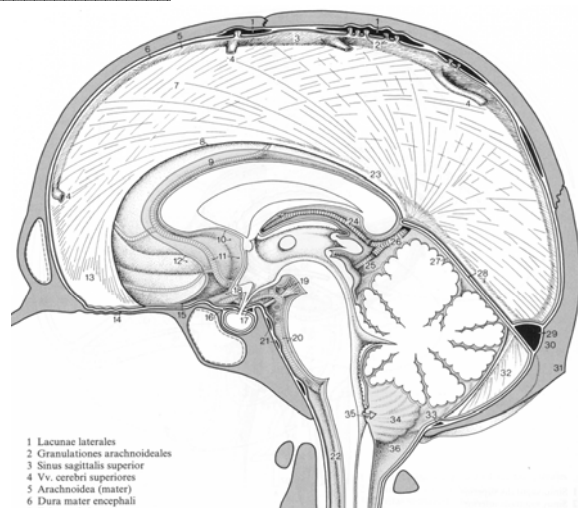


Spazi subaracnoidei spinali

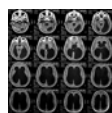




Spazi subaracnoidei intracranici



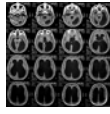
- 1 Lacunae laterales
- 2 Granulationes arachnoideales
- 3 Sinus sagittalis superior
- 4 Vv. cerebri superiores
- 5 Arachnoidea (mater)
- 6 Dura mater encephali
- 7 Fals cerebri



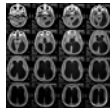
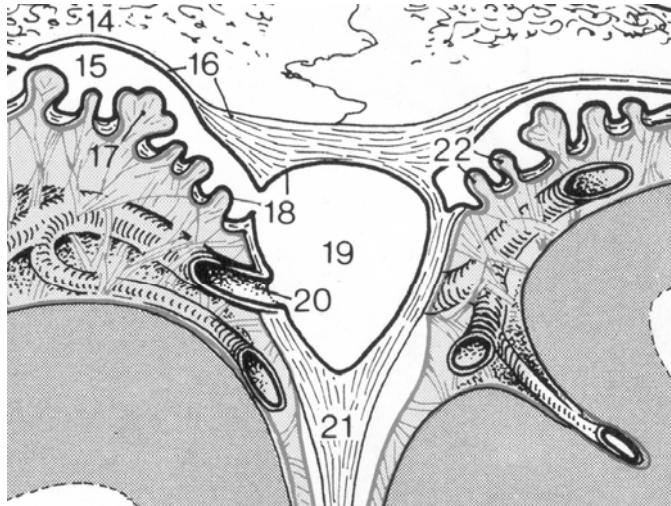
Riassorbimento Liquorale

Si effettua in massima parte:

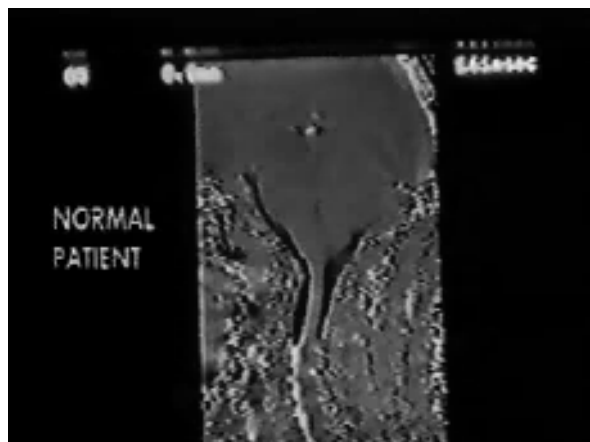
- A livello delle Granulazioni di Pacchioni
- Passivamente
- Per gradiente di pressione

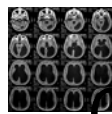


Riassorbimento Liquorale



Riassorbimento Liquorale

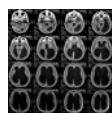




Classificazione idrocefalo

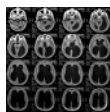
In base al meccanismo patogenetico:

- Idrocefalo ipersecretivo
- Idrocefalo aresorptivo
- Idrocefalo ostruttivo
 - Non comunicante
 - Comunicante



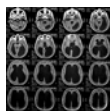
Idrocefalo ipersecretivo

- Flogosi dei plessi e dell'ependima
- Papilloma dei plessi corioidei



Idrocefalo aresorptivo

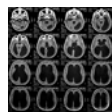
- Leptomeningite adesiva
- Esiti di emorragie subaracnoidee
- Mancanza congenita dei villi



Idrocefalo ostruttivo non comunicante

Ostacolo a livello di:

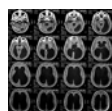
- *Forame di Monro*: cisti, tumori, esiti cicatriziali
- *III Ventr.*: cisti colloidi, tumori, esiti cicatriziali
- *Acq. di Silvio*: stenosi, tumori cerebellari
- *Forami di Luschka e Magendie*: Dandy-Walker



Idrocefalo ostruttivo comunicante

Causato da:

- Leptomeningiti
- Tumori della regione optochiasmatica

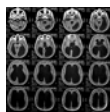


Clinica nel neonato

- Aumento della circonferenza e del volume cranico
- Aumento di tensione delle fontanelle
- Bozze frontali sporgenti
- Globi oculari ruotati in basso (segno del *sole calante*)

Compaiono:

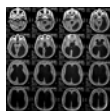
- Paralisi del VI
- Para- o tetraparesi spastica
- Crisi convulsive



Clinica nell' infante

La sintomatologia è molto variabile:

- Riduzione del visus
- Turbe caratteriali
- Cefalea
- Vomito
- Paralisi del VI



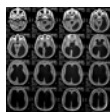
Clinica nell' adulto

La sintomatologia è lentamente progressiva:

- Cefalea
- Vomito
- Vertigini e malessere

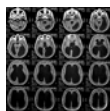
A cui si aggiungono:

- Paralisi del VI
- Rigidità nucale
- Sindrome di Parinaud



Diagnosi

- Clinica
- Transilluminazione del cranio (neonato)
- Rx cranio
- Ecoencefalografia
- TC cranio (dd. Con dilataz. ventricolare malformativa)
- RM
- Monitoraggio della P.I.C.



Terapia

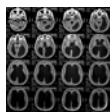
Trattamento conservativo:

E' limitato ad alcuni casi, es. infiammazione delle meningi, dei ventricoli, dell'acquedotto. Consiste in

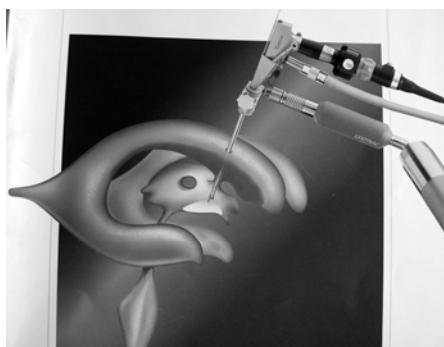
Terapia cortisonica

Antibioticoterapia

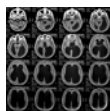
Trattamento chirurgico



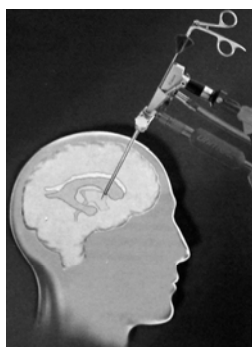
Terapia



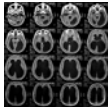
QuickTime™ e un
decompressore Codec YUV420
sono necessari per visualizzare quest'immagine.



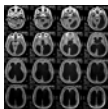


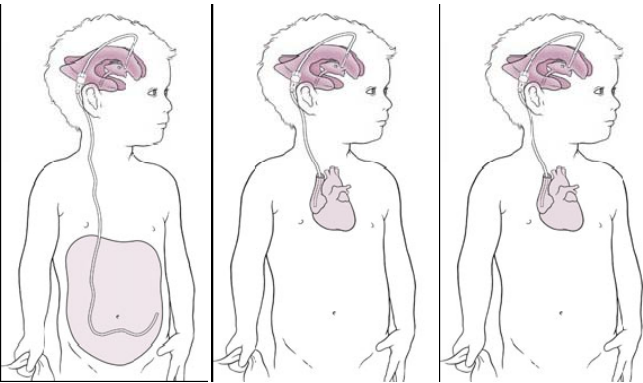
Terapia



QuickTime™ e un
decompressore Codec YUV420
sono necessari per visualizzare quest'immagine.



Terapia



Terapia

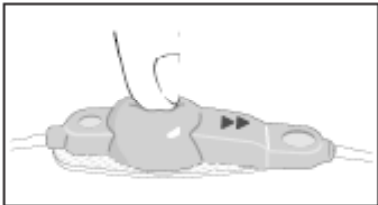


Fig 9. Valve Pumping

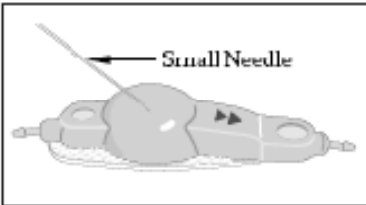
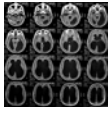


Fig 10. CSF Sampling

Small Needle



Terapia

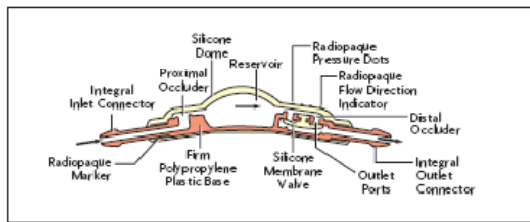
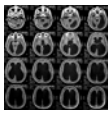


Fig 14. Cutaway of a Fixed Pressure Valve



Fig 11. Fixed Pressure Valves



Terapia

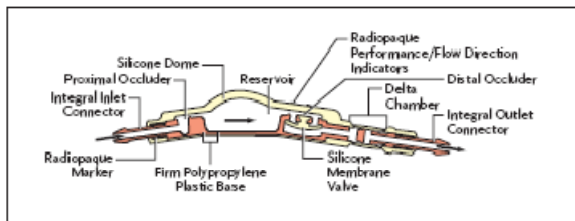
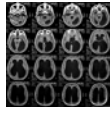


Fig 15. Cutaway of a Delta Valve



Fig 12. Delta® Valves with Siphon Control



Terapia

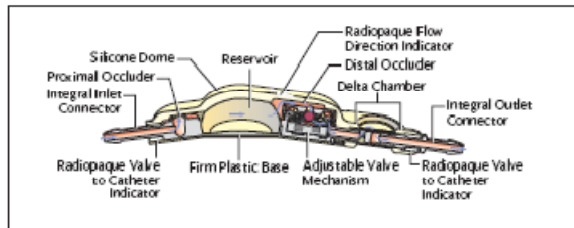


Fig 16. Cutaway of a Strata Valve



Fig 13. Adjustable Strata® Valves